ABSTRACT OF THE DISCLOSURE

A telecommunications network includes a switch configured for handling a VOIP call and a monitoring system, coupled to the switch, for identifying service deficiencies for a customer originating the VOIP call. In connection with the VOIP call, the switch handles a series of signaling messages. By sequentially examining the signaling messages handled by the switch after the messages are merged into a single, chronologically ordered file, the monitoring system identifies service deficiencies for the customer, thereby enabling initiation of proactive remedial action to address the identified service deficiencies. Service deficiencies are identified based upon an examination of one or more signaling messages. Warning messages generated to identify the service deficiencies may have customer information appended thereto, thereby enhancing the ability of the service provider to proactively initiate remedial action prior to receipt of a complaint from the affected customer.